REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

Section 103 rejections

Claims 1, 3-15, 17-20, and 26 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Novik (US 5,432,871) and Echerer et al. (US 5,7740,267, hereinafter, "Echerer"). Applicant respectfully traverses the rejections.

Applicant teaches a technique for performing image analysis on an image, e.g., scoring a medical image. Applicant's technique provides advantages of transmitting compressed images in a network environment without compromising accuracy in the image analysis.

The invention takes advantage of the fact that losses due to image compression techniques may not be noticeable to a human observer. Only compressed image data is sent to the user at the remote view station, thereby reducing transmission overhead.

Novik does not take advantage of the fact that losses due to image compression techniques may not be noticeable to a human observer. Novik discloses transmitting additional image data from the transmitting station to the remote view station (col. 10, 11. 38-47). The additional data corrects errors in a field of interest in the decompressed image at the remote view station such that the quality of the image at the remote view station is identical to the quality of the source image at the image server, i.e., lossless. In other words, the image at the remote view station contains all of the information in the source image.

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Echerer discloses performing image processing operation on an uncompressed image at a site.

Applicant teaches performing an image analysis operation at the image server and not at the remote view station. This is necessary because the image at the remote view station does not contain all of the information in the source image. This is due to losses sustained in the lossy compression operation performed on the source image prior to transmission. Consequently, any image analysis performed on the image at the remote view station may be inaccurate. However, Novik teaches that all of the information in a field of interest selected by a user at the remote view station is transmitted to the remote view station such that the image has the same quality as the uncompressed (lossless) image at the image server (col. 11, 11. 16-20). Therefore, there is no reason to perform image analysis or image processing operations at the image server. All of the information in the source image has been transmitted to the remote view station and any image analysis or image processing operations can be performed there.

Novik teaches away from increasing transmission overhead between the image server and the remote view station (col. 11, 11. 20-25). However, performing image analysis or image processing operations at the image server would necessarily entail additional transmissions between the image server and the remote view station. For example, the command to perform operations and the types of operations to perform would need to be transmitted from the remote view station to the image server. The results of such operations would then need to be transmitted from the image server back to the remote view station. These additional transmissions are unnecessary when all of the information in the source image is stored at the remote view station and such operations can be performed there.

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Applicants submit that one of ordinary skill in the art would not combine Novik and Echerer such that image analysis operations are performed at the image server when all of the information in the source image has been transmitted to the remote view station. Accordingly, Applicant submits that independent claims 1, 10, and 15, and their dependencies, are allowable.

Claims 2 and 16 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Novik and Echerer and in further view of Wood.

Claims 2 and 16 depend from independent claims 1 and 15, respectively. Applicant submits that these claims are allowable with their base claims.

Claims 23 and 25 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Novik.

Claim 24 was rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Novik in view of Wood.

Independent claim 23, from which claims 24-26 depend, has been amended to include the recitation of applying image analysis operations at the first location, e.g., an image server. Accordingly, Applicant submits that claim 23 and its dependencies are allowable for the reasons given above.

Attached is a marked-up version of the changes being made by the current amendment.

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Applicant asks that all claims be allowed.

Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: OCT 10, 2002

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Version with markings to show changes made

In the claims:

Claim 23 has been amended as follows:

23. (Three times Amended) A method comprising:

compressing a source medical image at a first compression level at a first location;

transmitting the compressed medical image to a remote view station at a second location for display;

receiving at the first location region information separate from a decompressed medical image from the remote view station, said decompressed medical image generated from the compressed medical image at the remote view station, wherein the region information defines a region of the decompressed medical image;

applying image analysis operations to a region of the source medical image corresponding to said region of the decompressed medical image at the first location; and

compressing [a] said region of the source medical image at a second compression level at the first location as a function of the region information, wherein the second compression level results in less information loss than the first compression level.

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